# **August Weather and Crop Summary**

# Weather

Extremely dry weather prevailed in the Northwestern and South-Central States, accompanied by very hot weather in the latter region that severely stressed pastures and immature summer crops, including cotton, soybeans, and sorghum. An already active wildfire season intensified from the Great Basin to the northern Rockies, but beneficial seasonal rains eased long-term moisture deficits in parts of the Southwest. Meanwhile in the Corn Belt, near-normal temperatures and widespread showers aided filling summer crops in eastern areas, but hotter, drier conditions brought some increase in stress on corn and soybeans in western areas. In the South, hot, dry weather resulted in further drought intensification as far east as Alabama, but beneficial showers returned to the southern Atlantic region, aiding immature summer crops and denting long-term moisture deficits. Cool, wet conditions lingered in the Mid-Atlantic region, where monthly temperatures averaged as much as 3°F below normal. In the Corn Belt, readings ranged from 1°F below normal to 3°F above normal. Monthly temperatures were near or slightly below normal in California and the Pacific Northwest, but averaged as much as 5°F above normal in the Intermountain West and up to 9°F above normal in eastern Kansas. Monthly temperatures averaged at least 4°F above normal in most areas from southeastern Montana southward onto the southern Plains and southeastward to the Delta.

August closed with a flurry of all-time-record highs. On August 29 in Alabama, the hottest day on record was observed in Mobile (105°F), while Tuscaloosa (107°F) matched their July 1952 standard. A day later, all-time records were shattered in Little Rock, AR (111°F), and in Louisiana at Alexandria (108°F), and New Orleans' Audubon Park (103°F). Hot Springs, AR recorded the Nation's highest temperature on the 30th, with a high of 114°F. Alexandria's record was broken again with a high of 109°F on the last day of August. Meanwhile in eastern Texas, all-time records were tied in Beaumont-Pt. Arthur (108°F) and Houston (107°F). El Dorado, AR posted 12 consecutive daily-record highs from August 24 - September 4, during which time their high temperatures averaged 107.3°F. The streak included an all-time-record-tying high of 112°F on August 31.

Little Rock endured their hottest month and hottest August on record, while several other locations observed their highest August temperatures in 20 years or more. Several stations tallied a record-setting number of triple-digit days during August.

#### Highest Monthly Average Temperature (°F)

<u>Location</u>	Avg.	Dep.	Former Record/Month
Little Rock, AR	89.4	+9.4	88.6 in July 1980

## Highest August Average Temperature (°F)

<u>Location</u>	Avg.	Dep.	Former Record/Year
Little Rock AR	89 4	+94	87.2 in 1954

## Hottest August (°F) in Selected Locations Since...

Location	Avg.	Dep.	Hottest August Since
Wichita, KS	86.6	+7.3	89.0 in 1936
Topeka, KS	85.4	+9.2	85.8 in 1947
Shreveport, LA	86.9	+4.7	87.5 in 1951
Wichita Falls, TX	90.3	+6.7	91.1 in 1952
Tupelo, MS	83.5	+3.9	86.0 in 1954
Memphis, TN	86.3	+5.3	87.2 in 1980
Ok. City, OK	85.4	+4.3	88.0 in 1980

Most Days of 100°F Heat in August			
<u>Location</u>	<u>Days</u>	Previous Record/Year	
Wichita Falls, TX	30	26 in 1980	
Dallas-Ft. Worth, TX	27	27 in 1952	
Oklahoma City, OK	24	22 in 1936	
Wichita, KS	23	22 in 1936	
Little Rock, AR	21	21 in 1954	
Memphis, TN	10	9 in 1943, 1954	

#### Most Days of 100°F Heat in a Calendar Year

Location	Days	Previous Record/Year
Mobile, AL	8	7 in 1954

For the first time on record, Amarillo, TX logged a high at or above 90°F on every day during August. Topeka, KS notched 16 August days of triple-digit heat, below their August 1936 record of 20 days, but more than the 10 such days observed during the 10 Augusts of the 1990's. Wichita, KS noted 16 consecutive days of triple-digit heat from August 19 - September 3, just 4 days behind their record of 20 days, set in August 1936. Through September 3, Wichita's 30 days with highs at or above 100°F represented their highest total in a calendar year since 46 such days in 1980 (the average is 10 days). Through August, highs at or above 90°F were attained on 55 days in Denver, CO and 56 days in North Platte. Records for a calendar year remain 60 days (in 1994) at Denver and 67 days (in 1934 and 1936) at North Platte.

In contrast, temperatures in Cleveland, OH failed to reach 90°F through August for the first time since 1960. Summer (June-August) readings remained below 90°F in Dayton, OH for only the second time on record (the other year was 1958). Toward month's end, however, hot weather reached the western Corn Belt, where Omaha, NE (101°F on the 28th) registered their highest temperature since 1995. August 31 featured the warmest weather of the year-to-date in locations such as LaCrosse, WI (95°F), Madison, WI (91°F), and Marquette, MI (90°F).

Scranton, PA noted a summer average temperature of 67.2°F, marking their coolest June-August period since 1982. Binghamton, NY (64.6°F, or 2.3°F below normal) experienced their second-coolest summer on record, behind only a 64.1°F average in June-August 1992. In Vermont, the mercury failed to reach 90°F in Burlington through August, compared with the normal of 6 days and last year's total of 19 days. Washington, DC tallied just 12 days of 90°F heat from January-August, well below their annual normal of 38 days.

Widespread rainfall continued to accompany the generally cool conditions in much of the Midwest and Northeast. Rochester, MN collected 5.35 inches of rain during August, capping their wettest summer (23.33 inches, or 197 percent of normal) on record. Meanwhile in Virginia, Norfolk's summer rainfall of 24.19 inches represented their highest June-August total since 28.11 inches fell in 1939. In New York, Binghamton's January-August total of 33.98 inches (139 percent of normal) represented their wettest start to a year, surpassing the 1994 record of 33.05 inches.

Wetter conditions also returned to parts of the Southwest, where a near-record, 146-day (March 9 - August 1) spell without measurable precipitation ended in Las Vegas, NV on August 2. With a total of 5.82 inches (193 percent of normal), Colorado Springs, CO experienced their fifth-wettest August on record, capped by a 2.99-inch deluge on the 28th. Salt Lake City, UT

netted 1.31 inches of rain on August 30, surpassed their 1.29-inch total observed during the previous 90 days of summer (June 1 - August 29). Ely, NV observed their fourth-wettest August (1.71 inches, or 206 percent of normal), aided by a 2-day total of 1.43 inches on August 29-30. Farther north, 0.14 inch of rain dampened Spokane, WA on September 2, ending their longest spell (57 days from July 7 - September 1) without measurable precipitation since 1988.

The rain helped to temper a heat wave that had produced a record-setting number of consecutive 90°F days in Ely, NV (21 days from July 19 - August 8). Records were also set for consecutive days with highs at or above 80°F in Helena, MT (44 days from July 7 - August 19), and 95°F or above in Grand Junction, CO (28 days from July 18 - August 14). Sharply cooler air arrived along the West Coast toward month's end. On the 29th in California, high temperatures of 62°F in Santa Rosa and 59°F in Santa Cruz were the stations' lowest on record during August.

Farther north, however, wildfires continued to burn. Through the end of August, U.S. wildfires burned nearly 6.5 million acres, nearly 230 percent of the 10-year average. According to the National Interagency Fire Center, fires in the Great Basin and northern Rockies accounted for more than 3.0 million burned acres, nearly 50 percent of the national total. During August alone, fires consumed about 2.9 million acres, more than 2.1 million acres of which burned in the aforementioned areas.

Meanwhile in Texas, Dallas-Ft. Worth's streak without measurable rainfall reached 62 days by month's end, eclipsing their former record of 58 days set in November-December 1950 and May-July 1934. Little Rock's record-setting, 27-day (August 5-31) spell without a drop of rain ended with a 0.53-inch total on September 1. Prior to August 2000, only one other calendar month (January 1986) featured no precpitation in Oklahoma City, OK, while only three (August 1936, November 1949, and January 1986) featured none in Wichita Falls, TX. According to preliminary data, Oklahoma's average rainfall during August was 0.12 inch (4 percent of normal), the lowest on record. Farther north, August rainfall totaled 0.43 inch (33 percent of normal) in Helena, MT, marking their 12<sup>th</sup> consecutive month with belownormal precipitation.

**Record-Low August Precipitation (Inches)** 

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<u>Location</u>	<u>Total</u>	<u>Normal</u>	Former Record/Year	
Abilene, TX	0.00	2.80	0.02 in 1952	
Ok. City, OK	0.00	2.60	0.17 in 1936	
Wichita Falls, TX	0.00	2.48	trace in 1936	
Dallas, TX	0.00	2.21	trace in 6 other years	
San Angelo, TX	0.00	1.93	trace in 1910, 1938, 1959	
Shreveport, LA	trace	2.43	0.02 in 1902	
Joplin, MO	0.05	4.26	not available	
Newberry, MI	0.19	n/a	0.22 in 1930	
Springfield, MO	0.34	3.51	not available	

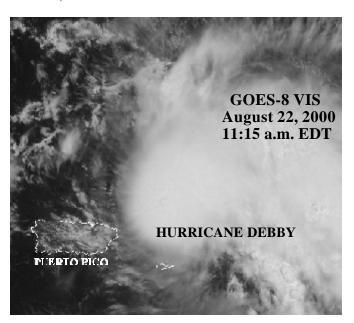
### **Driest August (Inches) in Selected Locations Since**

Briest riugust (menes) in selecteu Escutions since			
Location	<b>Total</b>	<b>Normal</b>	Driest August Since
Tulsa, OK	0.01	3.12	0.00 in 1896
Wichita, KS	0.14	3.02	0.04 in 1936
Lubbock, TX	0.01	2.51	trace in 1943
Valentine, NE	0.13	2.28	0.06 in 1947
Great Falls, MT	0.10	1.54	0.03 in 1969
Austin-Mabry, TX	0.13	2.05	0.06 in 1977

Streamflows continued to decline in the driest areas. For example, the Calcasieu River at Kinder, LA dropped to a stage of 1.05 feet on August 31, breaking a nearly half-century-old record

low. Elsewhere in the Calcasieu River basin, Whisky Chitto Creek near Mittie, LA fell to 1.98 feet on August 31, well below the September 1981 record of 2.26 feet.

During August, tropical activity included Tropical Storm Beryl, which made landfall early on August 15 about 115 miles south of Brownsville, TX, and short-lived Hurricane Debby, which passed just north of Puerto Rico on August 22. Beryl brought light but beneficial showers to southernmost Texas, and Debby produced heavy rainfall—locally in excess of 10 inches—in Puerto Rico's central highlands. More than 5 inches of rain soaked San Juan, PR, boosting their August total to 9.45 inches (178 percent of normal).



In Hawaii, widespread showers continued to provide some long-term drought relief in leeward areas. On Oahu, Honolulu's August rainfall, 1.17 inches (266 percent of normal), represented their highest monthly total since 1.27 inches fell in January, and only the seventh occurrence of monthly rainfall greater than 1 inch during the November 1997 - August 2000 period (normal is 23 months during such a 34-month period). Meanwhile in Alaska, August weather was highlighted by near- to belownormal temperatures and abundant precipitation. In the Aleutians, Cold Bay's monthly rainfall reached 6.11 inches (189 percent of normal), pushing their year-to-date total to 45.30 inches (222 percent). In Fairbanks, August rainfall totaled 3.04 inches, or 155 percent of normal. In addition, Fairbanks' average maximum temperature during August was just 59.2°F, their lowest during the 96-year period of record.

# **Fieldwork**

Above-normal temperatures promoted rapid crop development across most of the Nation during August, with many crops approaching maturity well ahead of normal in the Great Plains, lower Mississippi Valley, and Corn Belt. However, crop development lagged in parts of the eastern Corn Belt and along the Atlantic and Pacific Coasts due to cooler-than-normal temperatures. Hot, dry weather aided small grain harvest in the Corn Belt, Great Plains, and Pacific Northwest, but stressed maturing row crops, especially in Kansas and Nebraska. Excessive heat and moisture shortages also reduced crop conditions in the lower Mississippi Valley and Southeast, but rain periodically eased drought conditions along parts of the Atlantic Coastal Plains and Gulf Coast.